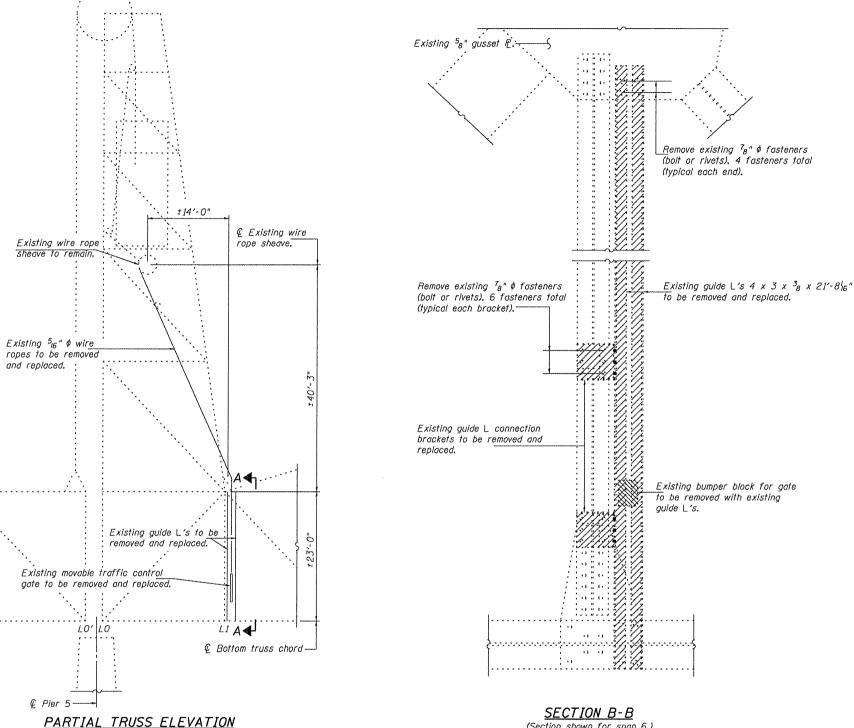
## STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION



(Section shown for span 6.) (Traffic control gate not shown for clarity.) (North truss shown. South truss similiar.)

## Notes:

See sheet 7 of 25 for Section A-A and location of Section B-B.

Work this sheet with sheets 7, 9, and 10 of 25.

All work necessary to complete the removal and replacement of the traffic control gate in span 6 shall be performed in accordance with Sections 501 and 505 of the Standard Specifications, except as indicated on the plans, and be paid for at the contract unit price lump sum for Traffic Control Gate Replacement, No. 2. This price shall include all material, equipment, and labor necessary to satisfactorily remove, replace, furnish and install, and/or reinstall guide angles, traffic control gate, bumper block assemblies, electrical components, sign panels, and wire ropes as well as the disposal of all material being replaced as specified in the plans.

## TRAFFIC CONTROL GATE REPLACEMENT PROCEDURE

- Raise the lift span to lower the traffic control gates down to the roadway.

  (Vertical movement of the traffic control gates is mechanically controlled by raising and lowering the lift span. The Contractor shall coordinate operation of the lift span with the Engineer.)
- 2. Detach the existing wire ropes from the wire rope sheaves. The lift span shall not be lowered until the wire ropes for each end of a gate have been detached. Prior to detaching the wire ropes, it is recommended that a location on the sheaves be match-marked to an adjacent structural member to assist with synchronization of the sheaves when the new wire ropes are installed.
- Detach the existing flexible electrical supply whip from the rigid metal conduit attached to the existing gates.
- 4. Remove the existing guide angles for the gates as indicated in the plans to allow the existing gates to be removed.
- 5. Remove existing gates.
- 6. Remove all existing grease and lubrication from the existing guide angles to be reused.
- 7. Install 3 out of the 4 proposed guide angles in span 6.
- 8. Install and block the proposed gates at a location ±7" above the existing curbs as indicated in Section A-A on sheet 9 of 25.
- 9. Reinstall the existing guide angle at the gate in span 4 and install the remaining proposed guide angle at the gate in span 6.
- 10. Proposed bumper blocks shall be installed snug against the bottom of the gate at each set of guide angles. Bumber blocks shall be clamped in place by tightening the bolts welded to the block assembly.
- 11. Thickly coat the inside surface of the guide angles with grease. The grease provided by the Contractor shall be subject to approval of the Engineer and shall be suitable for prolonged exterior exposure with a high resistance to moisture, heat, and oxidation.
- 12. Connect the existing flexible electrical supply whip to the rigid metal conduit and electrical cable on the proposed gates.
- 13. Connect the proposed wire ropes to each end of the gates.
- 14. With the lift span in the raised position, connect the proposed wire ropes to the existing sheaves. Caution shall be exercised by the Contractor when connecting the wire ropes to the sheaves to ensure that the sheaves at each end of the gate remain synchronized. Adjustments shall be made to the sheave positions and/or ropes as required for the gates to smoothly operate in a balanced manner to the satisfaction of the Engineer. The lift span shall be cycled up and down as directed by the Engineer to ensure proper operation of the lift gates.

TRAFFIC CONTROL GATE

REPLACEMENT DETAILS

ILLINOIS ROUTES 100 & 106 OVER

ILLINOIS RIVER

PUBLIC WATERS

	SHEET	NO. 8	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0	.,,,	757	20BR-2	SCOTT/PIKE	30	13
	OF 25 SHEET		SN	086-0001	CONTRACT	NO. 72	C39
			FED. R	DAD DIST. NO   ILLINOIS FED. A	D PROJECT		

DESIGNED - CEH

CHECKED - SDS

DRAWN - DLH

CHECKED - CEH. SDS

WHKS & CO. SPRINGFIELD, IL (217) 483-9457

ENGINEERING DESIGN FIRM #184001036

(Looking North)